Docket No.: 2038-304

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A process, comprising the steps of:

feeding at least a single continuous web in a machine direction as a component member of a disposable wearing article being continuously manufactured,

feeding continuous elastic members toward at least one surface of said web while said continuous elastic members are oscillated in a cross direction relative to said machine direction, and

attaching said continuous elastic members in a stretched state to said one surface in accordance with a desired layout,

wherein

in the step of feeding said web, the web is fed to a nip between a pair of press rolls substantially being in contact with each other and adapted to rotate in said machine direction around respective axes extending parallel to each other in said cross direction; [[and]]

in the step of feeding said elastic members, the elastic members are fed from upstream of said pair of press rolls to the nip between said press rolls via at least one guiding mechanism that oscillates adapted to oscillate said elastic members in said cross direction, and

<u>in the step of</u> attaching said elastic members to said web, the elastic members are attached to said web by means of an adhesive;

wherein each of said at least one guiding mechanism comprises:

a motor having a rotary shaft extending in a direction crossing said axes and adapted to repeat reversal of its rotational direction;

an arm connected directly with said rotary shaft and extending in a direction crossing said rotary shaft, said arm being formed on its distal end with a guiding

element adapted for passage of said elastic members, and said arm being adapted to swing around said rotary shaft as said rotary shaft rotates, wherein said arm is formed from a composite material comprising a fiber material and any one selected from the group consisting of thermoplastic synthetic resin and thermosetting synthetic resin; and

at least one feed member located upstream of said rotary shaft as viewed in said machine direction and adapted to direct said elastic members toward said guiding element; and

wherein, in the course of running from said feed member to said pair of press rolls via said at least one guiding mechanism, said elastic members are attached to said web while said elastic members are oscillated in said cross direction by said arm connected directly with said rotary shaft so as to repeat reversal of its swinging direction;

said process further comprising arranging said axes of said press rolls horizontally, said rotary shaft of said motor vertically, and said arm to extend horizontally from said rotary shaft toward said nip between said press rolls.

- 2. (previously presented) The process according to claim 1, further comprising using a servomotor as said motor.
- 3. (previously presented) The process according to claim 2, further comprising controlling said servomotor on the basis of a running speed of at least said web in said machine direction and said layout desired for said elastic members.
- 4. **(currently amended)** The process according to claim 2, wherein said <u>fiber material comprises</u> arm is formed from a composite material comprising any one selected from the group consisting of carbon fiber, glass fiber, metallic fiber, synthetic fiber, semi-synthetic fiber and natural fiber and any one selected from the group consisting of thermoplastic synthetic resin and

Application No.: 10/705,228

Docket No.: 2038-304

thermosetting synthetic resin.

5. (canceled)

6. (previously presented) The process according to claim 1, wherein said elastic

members are directed from said guiding element to said nip between said pair of press rolls so that

said elastic members are positioned in a plane tangential to said press rolls in a region in which said

press rolls substantially contact each other.

7. (previously presented) The process according to claim 5, wherein said elastic

members extend from said feed member to said guiding element at a deviation angle of 10° or less

relative to a horizontal plane.

8. (canceled)

9. (previously presented) The apparatus according to claim 15, wherein said motor is a

servomotor.

10. (previously presented) The apparatus according to claim 9, further comprising a

controller, wherein said servomotor is electrically connected with the controller which is

programmed to rotate said servomotor on the basis of a running speed of at least said web in said

machine direction and said layout desired for said at least one elastic member.

11. (currently amended) The apparatus according to claim 9, wherein said fiber

material comprises arm-contains a composite material comprising any one selected from the group

consisting of carbon fiber, glass fiber, metallic fiber, synthetic fiber, semi-synthetic fiber and natural

fiber and any one selected from the group consisting of thermoplastic synthetic resin and

4

thermosetting synthetic resin.

- 12. **(currently amended)** The apparatus according to claim 15, wherein said axes of said press rolls extend horizontally, said rotary shaft of said motor extends vertically, and said arm <u>extends</u> horizontally from said rotary shaft toward a nip between said press rolls.
- 13. (previously presented) The apparatus according to claim 15, wherein said arm extends substantially in a plane tangential to said press rolls in a region in which said press rolls substantially contact each other.
- 14. (previously presented) The apparatus according to claim 15, wherein said feed member and said guiding element are located so that said at least one elastic member extends from said feed member to said guiding element at a deviation angle of 10° or less relative to a horizontal plane parallel to the axes of said press rolls.
- 15. (currently amended) An apparatus for feeding at least a continuous web in a machine direction as a component member of disposable wearing articles being continuously manufactured, feeding at least one continuous elastic member toward at least one surface of said web while said at least one continuous elastic member is oscillated in a cross direction transverse to said machine direction, and attaching said at least one continuous elastic member in a stretched state to said one surface in accordance with a desired layout, said apparatus comprising:
- a pair of press rolls substantially contacting each other, said press rolls being rotatable around respective axes extending in said cross direction so as to feed said web in said machine direction, and
- a guiding mechanism located upstream of said press rolls as viewed in said machine direction to oscillate said at least one elastic member in said cross direction;

wherein said guiding mechanism comprises:

a motor which has a rotary shaft extending in a direction transverse to said axes and is adapted to repeatedly reverse a rotational direction of said rotary shaft;

an arm connected directly with said rotary shaft and longitudinally extending in a direction transverse to said rotary shaft, said arm being formed on a distal end thereof with a guiding element through which said at least one elastic member is passable, and said arm being adapted to swing around said rotary shaft as said rotary shaft rotates; and

at least one feed member located upstream of said rotary shaft as viewed in said machine direction and adapted to direct said at least one elastic member toward said guiding element;

wherein an axis of said rotary shaft is stationary relative to the axes of said press rolls; and wherein said arm is formed from a composite material comprising a fiber material and any one selected from the group consisting of thermoplastic synthetic resin and thermosetting synthetic resin.

- 16. (previously presented) The process according to claim 1, further comprising maintaining an axis of said rotary shaft stationary relative to the axes of said press rolls while the elastic members are being fed and oscillated at the same time towards said nip.
- 17. (previously presented) The process according to claim 1, wherein said elastic members are attached to said web by means of the adhesive only in regions corresponding to leg openings of the disposable wearing article being manufactured;

said method further comprising

cutting the elastic members between said regions so that the cut elastic members do not extend across en entire width of the disposable wearing article being manufactured, and

attaching an absorbent core to said web, wherein portions of the cut elastic members that have not been attached to said web contract to a relaxed state and are located near transverse edges of the absorbent core.

Application No.: 10/705,228

Docket No.: 2038-304

18. (previously presented) The process according to claim 1, further comprising controlling rotational oscillating movements of the arm of each said at least one guiding mechanism such that a stretching ratio of the elastic members fed by one guiding mechanism is different from that of the elastic members fed by the other guiding mechanism.

19. (previously presented) The apparatus according to claim 8, wherein a rotational axis about which the arm swings coincides with a rotational axis of said rotary shaft.

20-21. (canceled)

- 22. (previously presented) The apparatus according to claim 11, wherein said arm has a full weight of 96 to 121 g, a specific gravity of 1.5 to 1.8, a bending modulus of 98 to 201 GPa, and a full length of 250 to 350 mm, thereby allowing the servomotor to repeatedly swing said arm at a maximum angular acceleration of 15,000 rad/sec².
- 23. (currently amended) The process according to claim 4, wherein said arm has a full weight of 96 to 121 g, a specific gravity of 1.5 to 1.8, a bending modulus of 98 to 201 GPa, and a full length of 250 to 350 mm, thereby allowing the servomotor to repeatedly swing said arm at a maximum angular acceleration of 15,000 rad/sec².
- 24. **(new)** The process according to claim 23, wherein said servomotor repeatedly swings said arm at an angular acceleration of up to 15,000 rad/sec².
- 25. **(new)** The process according to claim 23, further comprising maintaining an axis of said rotary shaft stationary relative to the axes of said press rolls while the elastic members are being fed and oscillated at the same time towards said nip.

Docket No.: 2038-304

- 26. **(new)** The process according to claim 4, wherein said composite material comprises said fiber material and said thermosetting synthetic resin.
- 27. **(new)** The apparatus according to claim 11, wherein said composite material comprises said fiber material and said thermosetting synthetic resin.